

**ABSTRACT**

A direct sequence code division multiple access (DS-CDMA) receiver has an adaptive filter controlled by an adaptive algorithm for filtering data which has been multiplied by a spreading code. The filter has a length equal to the number of chips in the code. A multiuser detector operates on the output of the adaptive filter. Preferably, either the fast a-posteriori error sequential technique (FAEST) algorithm or the stabilised FAEST (SFAEST) is used as the algorithm.